M2 Cold Plate - 10mm x 10mm

Product Definition:
The Mikros M2 is an advanced 10x10mm microchannel cold plate with lower core thermal resistance and a smaller active area than our M1. It can be used to effectively cool high heat flux components including lasers, LEDs and other critical components. It can also be used as an evaulation unit for custom cooling design.

Mikros Cold Plate Technology

- **High Cooling Capacity** with M2 core
  Thermal Resistance below 0.020 C-cm²/W.
- **Low Pressure Drop** with 3-5 psi at low flow rates
- **Low Cost** per W/C dissipated at comparable flow rates
- **High Reliability** with no cooling capacity decrease over 15 years of endurance testing
- **Nickel and/or gold plating** for easy soldering attachment

Email [info@mikros.net](mailto:info@mikros.net) for more information and to order
M2 Performance Characteristics with Water

\[ R^* = \text{Resistivity} \equiv \frac{T_c - T_{in}}{q / A} \]

\[ R^* = R_{core}^* + R_{flow}^* \]

\[ R_{flow}^* = \frac{A}{\rho \cdot c_p \cdot Q} \]

\[ T_c = \text{cold plate surface temp} \]

\[ T_{in} = \text{fluid inlet temp} \]

\[ A = \text{active area} \]

\[ q = \text{heat flow} \]

\[ R_{core}^* = \text{core resistivity} \]

\[ R_{flow}^* = \text{flow sensible heating resistivity} \]

\[ Q = \text{water flow rate} \]

\[ \rho = \text{density of water} \]

\[ c_p = \text{specific heat of water} \]